

**REMARKS**

Claims 1-16, 20-23 and 25 are pending. By this Amendment, claims 1, 5-8, 13-14, 16, 20 and 22-23 are amended, claim 25 is added and claims 18 and 24 are canceled without prejudice or disclaimer. Reconsideration in view of the above amendments or the following remarks is respectfully requested.

A. The January 28, 2008 Office Action rejected claims 16 and 20 for informalities and - rejected claims 1-13 and 21-24 under 35 U.S.C. §112, second paragraph. Applicants respectfully submit that above amendments obviate the grounds for the rejection. Withdrawal of the rejection for informalities and under 35 U.S.C. §112 is respectfully requested.

B. The January 28, 2008 Office Action rejected claims 1-5, 7, 11-13 under 35 U.S.C. §102(e) over US Patent No. 7,024,221 to Paulus et al. (hereafter "Paulus") and US Patent No. 6,907,089 to Jensen et al. (hereafter "Jensen").

The January 28, 2008 Office Action rejected claims 1, 6, 8-10, 14-22 and 24 under 35 U.S.C. §103(a) over US Patent Publication 2003/0067359 to Darabi et al (hereafter "Darabi"), Paulus and Jensen. Since the references, individually or in combination, fail to disclose or suggest features of the claims, the rejections are respectfully traversed.

Applicants respectfully submit that at least features of a low-IF analog radio receiver including a first front-end down-conversion mixer, a second down-conversion mixer to convert said intermediate frequency I and Q signals into a base-band signal with desired signal centered

at DC, said second down-conversion mixer to translate a DC offset in frequency domain to a frequency higher than said desired signal, said translated DC offset located at the same frequency of a second LO frequency; and a notch filter coupled to said second down-conversion mixer to reduce said translated DC offset are not disclosed or suggested by references or their combination.

Applicants respectfully submit that Paulus discloses a digital down-converter circuitry in receiver digital circuitry 851 in contrast to an analog receiver recited in claim 1. See at least Figure 8 and column 14 lines 39-53.

Applicants respectfully submit that Jensen discloses digital IF signal 34 or digital signal 120 in contrast to an analog receiver recited in claim 1. See at least Figures 1-6 of Jensen.

This application discloses difficulties with digital filtering in at least a feature of a second mixer, and claim 1 recites a low-IF analog radio receiver. Applicants respectfully submit that Paulus and Jensen do not teach or suggest modifications to their disclosure that would result in at least features of claim 1.

Applicants respectfully submit that Darabi does not disclose a second mixer with at least features to convert the IF I and Q signals into a base-band signal ( $BB_I$ ,  $BB_Q$ ) with desired signal centered at DC, the second mixer (4) to translate a DC offset (DC offset) in frequency domain to a frequency higher than said desired signal, said translated DC offset (frequency translated DC offset) located at the same frequency of the second LO frequency. See at least pages 9 and 11-12 of the January 28, 2008 Office Action.

Further, Applicants respectfully submit that Darabi does not teach or suggest any modification to its disclosure that would result in features and combinations thereof recited in claim 1. In addition, Applicants respectfully submit that Darabi, Paulus and Jensen, individually or in combination, would not result in features and combinations thereof recited in claim 1.

For at least the reasons set forth above, Applicants respectfully submit that claim 1 defines patentable subject matter. Claim 14 defines patentable subject matter for at least reasons similar to claim 1. Claims 18 and 24 are canceled without prejudice or disclaimer. Claims 2-13, 15-16 and 20-23 respectively depend from claims 1 and 14, and therefore, also define patentable subject matter for at least that reason as well as their additionally recited features. Withdrawal of the rejection of claims 1-16 and 20-23 under 35 U.S.C. §103 is respectfully requested.

C. Claim 25 is newly added by this Amendment and believed to be in condition for allowance.

### **CONCLUSION**

Prompt examination and allowance in due course are respectfully solicited. Should the Examiner have any questions regarding the above-identified application, the Examiner is invited to contact the undersigned attorney, **Carl R. Wesolowski**, at the telephone number listed below.

Serial No. 10/689,932

Docket No. GCTS-0039

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-4574 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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